

NOTES ON  
GYNAECOLOGICAL  
NURSING  
HELLIER

Store  
Health  
Sciences

WY  
156.7  
HEL

1/6

STORE

WY  
156-7 HEL



3 0106 01350 1837

Hart Store

Medical Library - Yorktown College

---

Presented by the Author.

16 Dec: 1891

---

NOTES ON  
GYNÆCOLOGICAL  
NURSING

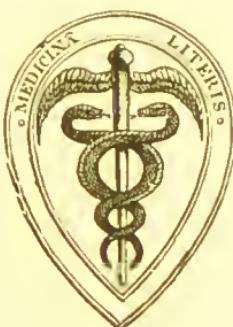
BY

JOHN BENJAMIN HELLIER  
M.D. LOND., M.R.C.S. ENG.

UNIVERSITY SCHOLAR IN OBSTETRIC MEDICINE ; LECTURER ON THE DISEASES  
OF WOMEN AND CHILDREN IN THE YORKSHIRE COLLEGE OF THE  
VICTORIA UNIVERSITY ; SURGEON TO THE HOSPITAL FOR  
WOMEN AND CHILDREN AT LEEDS

"Trifles make perfection, and perfection is no trifle"

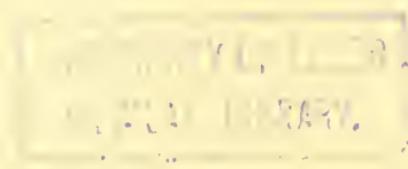
MICHAEL ANGELO



LONDON  
J. & A. CHURCHILL  
11 NEW BURLINGTON STREET

1891

*ASSESSED FOR RETENTION*  
*07/02*



*Although these "Notes" are addressed to Nurses, they will probably be of value to Students and Junior Practitioners. In Gynaecology as elsewhere the best nursing will be obtained by those who have most clearly in their minds what a nurse's duties are, and what practical details are involved in carrying them out.*



Digitized by the Internet Archive  
in 2015

<https://archive.org/details/b21535462>

# CONTENTS.

## INTRODUCTION.

PARAGRAPH	PAGE
1. PURPOSE OF THE WORK . . . . .	7
2. NATURE OF GYNÆCOLOGICAL CASES . . . . .	9

## CHAPTER I.

### HOW TO CARRY OUT THE PRINCIPLES OF SURGICAL CLEANLINESS IN GYNÆCOLOGICAL NURSING.

3. RATIONALE AND PRINCIPLES . . . . .	12
4. TERMS DEFINED . . . . .	16
5. SPECIAL SOURCES OF INFECTION . . . . .	17
6. ABUSE OF ANTISEPTICS . . . . .	19
7. CORROSION OF INSTRUMENTS BY ANTISEPTICS . . . . .	21
8. SURGICAL CLEANLINESS OF THE HANDS . . . . .	22
9. ANTISEPTIC LUBRICANTS . . . . .	25
10. ANTISEPTIC DRESSINGS . . . . .	26
11. SURGICAL CLEANLINESS IN SPONGES . . . . .	28
12. SURGICAL CLEANLINESS IN STEEL INSTRUMENTS, ETC. . . . .	29
13. SURGICAL CLEANLINESS IN CATHETERS, VAGINAL TUBES, ETC. . . . .	30
14. PRECAUTIONS RELATING TO PERSON OF PATIENT . . . . .	31
15. A NURSE'S PERSONAL PRECAUTIONS . . . . .	33

## CHAPTER II.

### WHAT TO OBSERVE AT THE BEDSIDE IN GYNÆCOLOGICAL CASES.

16. POINTS COMMON TO ALL CASES . . . . .	34
17. POINTS SPECIAL TO GYNÆCOLOGICAL CASES . . . . .	34
CONDITION OF EXTERNAL PARTS . . . . .	35
VAGINAL DISCHARGES . . . . .	35
MENSTRUATION . . . . .	35
CONDITION OF RECTUM AND FÆCES . . . . .	36
CONDITION OF BLAÐDER AND URINE . . . . .	37
CONDITION OF ABDOMEN . . . . .	38

PAR.	PAGE
18. SIGNS OF ABORTION . . . . .	38
19. SIGNS OF LABOUR . . . . .	39

### CHAPTER III.

#### DETAILS OF SPECIAL MANIPULATIONS.

20. HOW TO PLACE PATIENTS FOR VAGINAL EXAMINATION . . . . .	41
21. APPLIANCES USED IN VAGINAL EXAMINATION . . . . .	42
22. NOTE ON OUT-PATIENT WORK . . . . .	45
23. HOW TO GIVE VAGINAL DOUCHE . . . . .	45
24. ON VAGINAL SUPPOSITORIES . . . . .	49
25. ON GLYCERINE TAMPONS . . . . .	49
26. TO PASS A FERGUSSON'S SPECULUM . . . . .	49
27. TO ARRANGE A SIPHON . . . . .	51
28. TO PASS A CATHETER BY TOUCH . . . . .	51
29. TO WASH OUT THE BLADDER . . . . .	53
30. ON THE LITHOTOMY POSITION . . . . .	54

### CHAPTER IV.

#### ON THE NURSING OF SPECIAL CLASSES OF CASES.

##### I. ABDOMINAL CASES.

31. PREPARATION FOR ABDOMINAL SECTION IN A PRIVATE HOUSE . . . . .	56
32. APPLIANCES PREPARED BY NURSE . . . . .	58
33. PREPARATION OF PATIENT . . . . .	62
34. AFTER-TREATMENT . . . . .	63

##### II. OTHER CASES.

35. RUPTURED PERINEUM . . . . .	65
36. VESICO-VAGINAL FISTULA . . . . .	67
37. CARE OF ABORTION CASES . . . . .	68
38. FIRST AID IN FLOODING . . . . .	69
39. HYSTERIA . . . . .	72
40. MALINGERING . . . . .	73
41. SUNDRY PRECAUTIONS . . . . .	75

### APPENDIX.

STRENGTH OF ANTISEPTICS AND MEDICATED DOUCHE	77
--	----

# NOTES ON GYNÆCOLOGICAL NURSING.

---

## INTRODUCTION.

1. **Purpose of this Work.**—The following notes are intended for nurses who, having already received training in general medical and surgical work, are entering gynæcological wards. An acquaintance with the ordinary literature of nursing is presupposed throughout. To supplement not to supplant other works is the author's intention. Those who seek further information on the care of the sick in general will do well to consult such manuals as those of Dr. Cullingworth or Dr. Laurence Humphry, and others.

Nothing is more unsatisfactory than to have to qualify and be responsible for the performance of duties which are undefined

or unknown. As a student and teacher, the author has proved how much time may be lost in finding out what has to be learned or to be taught. Experience as resident medical officer at one hospital for women, and as honorary surgeon to another, has led him to feel that a nurse who enters a special hospital will be materially assisted by a concise account of her new duties ; and as he is not aware of any publication which exactly meets this requirement in regard to gynaecological work, he has attempted to supply the want in the following pages.

Instruction is here given in certain duties which in many hospitals no nurse is called upon to undertake. In other hospitals, however, where there is but a single resident officer, or no resident staff at all, in private nursing homes, and in cases in private practice, it is often a great convenience to the surgeon to be able to devolve such duties upon a competent nurse, and such a course is often very acceptable to the patient. Nurses, too, often stand in need of guidance in emergencies where no immediate skilled assistance is available.

To the district nurses who visit our dispensary patients, these pages may be of some value, and there is no branch of the nursing profession which the author would more gladly help.

But over and above all these considerations, it is desirable in the abstract that the range of duties entrusted to nurses should be enlarged. *Granting the fundamental principle that a nurse only exercises her skill under authority and in accordance with instructions,* there need be no narrow limit to the extent to which her skill is developed. As a matter of fact, a nurse who is already able to apply a roller bandage to the leg or scalp, or to pass a catheter *sans voir*, can readily be taught to give a hypodermic injection, to wash out a bladder, to pass a vaginal speculum, and remove a Hodge's pessary. In many such matters a nurse will soon be decidedly ahead of the average three-months clinical clerk or dresser.

**2. Gynæcological Cases Defined and Classified.**—Gynæcology means the study of the diseases peculiar to women. It does

not include the consideration of labour, and the lying-in or puerperal state, which are included in the terms midwifery or obstetrics. The cases which occupy the gynaecological nurse are :—

(a) A large number of cases of diseases of the womb and its appendages, and of the vagina and external parts. To these will be added in most hospitals certain disorders of the bladder and lower bowel, and perhaps of the breast also. Much care and patience in the carrying out of minor local measures will be required here.

(b) A series of most important operations involving abdominal section, such as *ovariotomy*, *oophorectomy*, *abdominal hysterectomy*, together with certain serious operations performed through the vagina, such as *vaginal hysterectomy*, and removal of tumours from within the womb. No operations in surgery require more incessant care and vigilance in the preparation and after-treatment, or more conscientious observance of the conditions of surgical cleanliness than these.

(c) A series of plastic operations, or

operations for repair, such as those for ruptured perineum and vesico-vaginal fistula. In these almost everything depends upon securing union by first intention, and here again success always largely depends upon good nursing.

(d) That hospital is indeed fortunate which has not from time to time cases of prolonged suppuration and hectic fever, which tire the patience of all concerned, and are a source of danger to other patients. And yet some of the most unpromising of these cases can be saved by an infinity of care and trouble.

(e) A well-marked class of so-called nervous, neurotic, or hysterical patients will be well represented in all gynaecological hospitals. To these we shall refer again. *See par. 39.*

(f) All ordinary medical and surgical complications may occur from time to time. So also may miscarriage, and even ordinary labour.

## CHAPTER I.

### *HOW TO CARRY OUT THE PRINCIPLES OF SURGICAL CLEANLINESS IN GYNÆCOLOGI- CAL NURSING.*

3. **Surgical Cleanliness** is of supreme importance in gynæcological wards, and it is necessary that every nurse should understand the reason why such is the case. If she do not, many of the details here enjoined will seem needless and irksome, and she will have little spontaneous zeal for carrying them out ; but if she clearly grasp how wound-poisoning arises and what it means, she will not only be anxious to guard against it by the observance of all enjoined precautions but will be able to apply the same principles in many circumstances where no forewarning has been possible.

The first point to be realised is that all dirt or foreign matter in or near a wound

threatens *sepsis* or poisoning in the wound. The absence of such dirt is implied by the term surgical cleanliness ; but this means not only freedom from foreign matter which is perceptible to sight or smell, but also from any germ or poison whatever ; and the presence of some of these all too easily escapes detection by the senses.

The worst of all kinds of dirt is that which arises from putrefying organic matter, for this contains a living poison, a poison which can grow and multiply like weeds in a garden, or mould in a damp cellar, and its action can spread like that of yeast in dough. Whenever anything turns offensive or putrid such living poison germs swarm.

It must next be remembered that any raw surface, particularly a recent wound, is liable to absorb such material. So are the internal passages and cavities of the body. Dressings soaked with pus from an abscess, linen soiled by vaginal discharge, sponges soaked with blood, surgical instruments imperfectly cleaned, will all infallibly breed wound-poison if left alone ; and if the discharge be offensive, the poison is already

present, ready to produce the most disastrous consequences.

If, for example, a catheter were fouled by decomposing urine, and if in this condition it were introduced into a perfectly healthy bladder, it is probable that in a day or two that bladder would be found full of ammoniacal urine mixed with mucus and pus. If a sponge that had escaped washing were used to cleanse a recently sutured perineum, the whole wound might suppurate and the operation completely fail. If just after giving a vaginal douche to a septic case a nurse took her place to hand sponges at an ovariotomy, the patient might die in consequence.

Every nurse will have been struck with the extreme difficulty of freeing the hands from odour when they have been fouled by offensive discharge. No amount of washing with soap and disinfectants seems to accomplish it. This is a valuable lesson in the subtleness and tenacity of the enemy we have to combat.

Considering that recent wounds are particularly liable to infection, and that in

gynaecological wards operation cases are necessarily brought into the neighbourhood of those which are septic, or which have materials ready for sepsis to arise on the least carelessness, it must be very plain why a gynaecological nurse has so much need to be careful to preserve surgical cleanliness and to prevent the poisoning of her patients.

Here are three principles for preventing wound-poisoning.

I. *Avoid carrying poison to the patient.* This embraces all we shall have to say hereafter concerning the surgical cleanliness of hands, sponges, dressings, instruments, and so on.

II. *Avoid giving wound-poison the opportunity of growing and multiplying.* This especially includes the use of anti-septics and the rapid removal and destruction of everything which might become foul, such as the discharges from wounds. It means giving the poison no soil to grow on.

III. *Avoid carrying poison from the patient.* This is partly included in the

above, but it embraces more particularly the subject of disinfection or destruction of poison already existing, and the special precautions necessary when a nurse has been obliged to come in contact with a septic case.

4. It will be useful here to give a definition of certain terms frequently used.

*Sepsis*, as we have said, means wound-poisoning.

*Septic* means "in a condition of sepsis," or "causing sepsis."

*Asepsis* means the absence of sepsis, and aseptic is the corresponding adjective. The term *Antiseptic* is applied to any material or agent which is not only free from septic matter, but has also the power of preventing or hindering its production and growth.

For instance, recently boiled water is aseptic; so is perfectly clean linen; so are new sponges properly prepared, new lint, wool, and simple dressings.

But solution of carbolic acid, sal-alembroth wool, boracic wool, etc., are *antiseptic*. Pus and blood absorbed by these

would resist putrefaction far longer than if simple dressings merely were used. To illustrate the potency of antiseptics properly used the author may say that he has in his possession a jar of zinc ointment made with lard, which he has kept for twelve years in a damp cupboard, and which is perfectly free from unpleasant taste or odour, and from mouldiness. The reason is that the lard was made antiseptic with benzoic acid. Without this it would hardly have kept as many days.

The term *Disinfectant* is applied to agents used for destroying septic material. Such are chloride of lime, burning sulphur, strong carbolic acid, etc. All antiseptics are, to some extent, disinfectants, and the term is indeed often used somewhat vaguely.

**5. Certain Cases are specially Dangerous** as sources of infection and generators of wound-poison. Such are all inflammations of the womb that are accompanied by offensive discharges, all abscesses discharging offensive pus, and in general all inflammatory discharges, as, for example, the discharge from the drainage tube when

peritonitis has come on after abdominal section. Erysipelas and erysipelas-like inflammation are dangerous, so is sloughing ulceration. We must especially mention the dangerous nature of the discharge in venereal disease. Every nurse should, for her own sake, be specially careful not to receive any such matter on to a cut or scratch on the hand, or around or beneath a sore finger-nail ; whilst to rub the eye with a finger which had touched such a wound might cause the most virulent inflammation and loss of sight.

A sore or wound upon the hand should be protected with plaster, or an india-rubber finger-stall, before any ward duties are undertaken. If it is feared that any matter has entered such a wound it should be thoroughly washed under a stream of water ; a recent cut should be encouraged to bleed by compressing the veins above. Then a point of nitrate of silver, or better still, a drop of pure nitric acid should be applied to the spot.

The signs of mischief following a poisoned wound would probably be pain, redness,

heat, swelling, and perhaps induration at the affected spot. Also there might be red lines running up the skin of the hand or arm, due to inflamed lymphatic vessels, or pain in the armpit, due to inflamed glands; also there might be shivering and fever. Such symptoms should lead a nurse to consult a surgeon without an hour's delay. Complete rest, fomenting and poulticing, should be the immediate treatment until the surgeon comes.

And here we may add, that whatever may be the disease for which a patient is admitted, it is very important that the presence of any chronic discharge from any part should be recognised. For instance, an offensive discharge from the ear or nose, or from an old abscess or suppurating gland, or from a sinus connected with bone disease, is an undoubted source of danger, and careful attention to it is necessary.

6. The next point to be noticed is that antiseptics are capable of abuse, and wrongly used may do harm rather than good. For each purpose the antiseptic used must be suitable, and adequately

diluted. Danger to patients and damage to fabrics and instruments result from using them too highly concentrated or from employing the wrong agent. For instance, a glass catheter may be put into strong nitric acid. This would at once spoil a gum elastic catheter, which however might be safely soaked in a 1 in 500 solution of corrosive sublimate; but if the nurse were to pour this over a dish of ovariotomy instruments she would have a day's work to clean them again.

But the most serious danger to be guarded against is that of the absorption of antiseptics into the blood when they are used for wounds or internal cavities.

The surface of the unbroken skin may be safely washed with a strong solution of carbolic acid or of corrosive sublimate, which if injected into a wound or into the peritoneum would cause the patient to suffer from carbolic acid or mercurial poisoning. The vagina will bear a much stronger injection than the rectum because the bowel is part of the digestive tract and can absorb quickly (as when a patient is

fed by nutrient enemata). In fact, there have been very severe symptoms immediately after the injection of very dilute solutions of carbolic acid into the rectum. Again, it must be remembered that a large quantity of a weak solution may mean a powerful dose of the agent in question. "Perchloride of mercury, one part in three thousand," sounds inoffensive enough, but a pint of this would contain more than three grains of a drug whose ordinary dose is from  $\frac{1}{16}$  to  $\frac{1}{8}$  of a grain, and would therefore contain 24 times the maximum dose. *Antiseptics must then be diluted as directed*, and for internal use employed in a prescribed quantity only. And as it is obvious that a certain amount of responsibility rests upon every one who uses antiseptics, the nurse should always ask for exact directions in the above particulars.

**7. Corrosion of Instruments by Antiseptics.**—The following antiseptics attack metal instruments :

Solution of perchloride of mercury.

Salufer solution.

Sanitas.

Carbolic acid, if action is long continued.

Solutions of iodine.

Solutions of iron compounds.

Sulphurous acid.

Chlorinated lime, also called "chloride of lime."

Most metals are attacked by nitric acid, and when it has to be applied an aluminium or vulcanite instrument must be used. It is a mistake to suppose that nickel-plated surfaces will not rust or corrode, and we have seen the nickel plating peeling off in flakes from a pair of midwifery forceps on to which some tincture of iodine had fallen.

We will now examine in detail the methods of procuring *asepsis* and *antisepsis* in gynæcological work.

**8. Surgical Cleanliness of the Hand.**—The hand must be rendered surgically clean (aseptic) before any wound is dressed, any catheter passed, or other minor operation undertaken. The nurse washes the hand before dressing a case that she may bring no poison to it, and after she has

dressed it that she may carry no poison from it.

Thorough use of soap, water, and the nail-brush are the first of all aseptic measures.

Germs are specially liable to lodge beneath the nails. The nail-brush must itself be clean, and not one of those antiquarian relics fouled by the accretions of an indefinitely long period of miscellaneous use, such as one sometimes sees in a lavatory. In a hospital the nail-brushes should be systematically destroyed after a certain amount of use, and replaced by new ones. A small piece of pumice stone is useful also, but this must be renewed frequently.

*Antiseptic soaps* are useful, such as carbolic soap, terebene soap, thymol soap. Seller's naphthol-potass soap is from its alkalinity very efficacious in cleaning the skin.

The antiseptic and disinfectant solutions most suitable for the same purpose are:—*Condy's fluid* (permanganate of potassium): Two teaspoonfuls to the pint is

enough. The crystals may also be used, and these are a convenient form for district nurses to carry. Do not use soap with Condy's fluid, or its oxidising power is spent on the soap.

*Salifer powder*: Use about a teaspoonful, or one of the little cubical cakes to the pint.

*Carbolic acid* in a strength of about 2 p.c. is one of the commonest agents in use, and is as good as anything for disinfecting the hands after contact with offensive matter.

*Sanitas fluid* needs but little dilution, and leaves a more pleasant odour than carbolic acid.

*Tincture of iodine*: 2 or 3 teaspoonfuls to the pint, is a potent antiseptic and disinfectant, and very portable.

One of the most powerful antiseptics in use is *perchloride of mercury*, called also *bichloride of mercury*, or *corrosive sublimate*. This, in its concentrated form, is an active poison. It may be safely used for the hands in the proportion of 1 part in 1000. In all specially dangerous cases this should be used.

It must be remembered that all antiseptics and disinfectants need time to act, and the hands may need prolonged immersion to make them aseptic. Often nothing but the lapse of some twelve hours or more will remove offensive odour. Rubbing the fingers with turpentine before and after touching the more foetid cases is a fairly efficacious plan.

9. The use of antiseptic instead of simple lubricants for fingers, specula, pessaries, etc., is advantageous.

Carbolic oil (1 in 20) is effective, but is apt to drop upon the sheets.

Vaseline impregnated with thymol or eucalyptus oil is better. We append below formulæ for antiseptic lubricants, which are easily washed from the hands after use. The paste should be kept in a small covered pot and replenished frequently.

*Formula for Thymol Paste:*

Take of Thymol . . . . . 20 grains.

Rectified Spirit enough to dissolve Thymol.

Glycerine . . . . . 1 ounce.

Purified Soft Soap . . . . . 2 ounces.

Mix.

**Pasta pro tactu** (Pharmacopœia of the London hospitals) :

Take of Soft Soap . . . . .	2 ounces.
Glycerine . . . . .	2 ounces.
Carbolie Acid . . . . .	1 drachm.
Oil of Cloves . . . . .	12 minimis.
Mix; and add, if necessary, Rectified Spirit 2 drachms.	

### Glycerine of Mercury :

Take of Glycerine . . . . .	1 ounce.
Perchloride of Mercury . . . .	$\frac{1}{2}$ grain.
Mix.	

10. **Antiseptic Dressings, etc.** — We need not speak here of the dressings for an ordinary surgical case. We have said enough to make clear the importance of dealing effectively with discharges, etc. For such purposes a series of dressings are sold already impregnated with disinfectants, such as carbolic gauze, boracic (or boric) wool and lint, salicylic silk, and corrosive sublimate wool (called sal-alembroth), and other kinds. Some of these are made up ready in pads or "tissues," such as *Gangee tissue*, *wood wool tissue*, *sanitary towels*, etc. Before such pads are used they need to be held in front of the fire for a few minutes. Remember, however, that these dressings

are highly inflammable (see par. 41). Cotton wool when used must be of the kind which has been deprived of its oil and rendered "absorbent." This has a more crisp feel than ordinary cotton wool, and absorbs more readily.

For the worst cases, such as those with cancerous or faecal discharge, a pad of "marine lint" is best. Some absorbent wool may be placed next to the skin, and some iodoform may be added also.

All the above must be changed frequently, and at once destroyed after use by burning in the fire. Every nurse should know something of the relative **cost of dressings**, for a little care may effect a considerable saving in what is always a very heavy item in the annual expenditure of a hospital. For instance, wood wool is cheap, so is perchloride of mercury. If wood wool tissue, which is impregnated with mercury, will answer the purpose, the more expensive antiseptic gauzes and dressings present little advantage except to the seller.

Probably the systematic use of "sanitary

towels" might be replaced by appliances which any nurse could extemporise from such materials.

**II. Surgical Cleanliness in Sponges.—** Sponges are so great a source of trouble and anxiety, absorbing septic matter so readily and harbouring it so tenaciously, and being so difficult to keep aseptic, that surgeons use them as little as possible, and obtain new ones for special cases, and particularly for abdominal sections. Pieces of aseptic lint or absorbent wool, or the so-called "artificial sponges," or towels previously boiled and wrung out of antiseptic solution, may largely be used instead.

**To Prepare New Sponges.**—Wash them repeatedly in clean water until all the sand is removed, then soak them before use for a day or two in antiseptic solution, say carbolic 1 in 40 ( $=2\frac{1}{2}$  per cent). If they are soaked in perchloride of mercury, they stain dark when soaked with blood.

The following is a plan by which they can be bleached and rendered beautifully soft :

- (1) Dissolve two ounces of hydrochloric acid in a pint of water.
- (2) Dissolve two ounces of hyposulphite of sodium in a pint of water.

Mix the two solutions thus prepared.

Dip each sponge into the mixture, and then throw it at once into water containing a little soda, and wash thoroughly.

Sponges must not be rendered aseptic by prolonged boiling in water. This will spoil them by reducing them to a tough leathery mass. They must be cleaned as soon after use as possible. Soaking in water, to which a little bicarbonate of sodium has been added, facilitates this cleaning. Lastly, soak them in carbolic solution (1 in 40) for a day. Then wring them as dry as possible. They are best kept in large stoppered glass jars.

**12. Care of Surgical Instruments.—**  
Thorough cleaning directly after use is the secret of keeping these aseptic. Carefully sponge away the blood from the joints and crevices, and dry them perfectly with a towel. Toothed instruments need cleaning with a small hard brush. Every good instrument is made so that it can be thoroughly cleaned, but some require to be

taken to pieces for the purpose, such is the case with écraseurs, serre-nœuds, Wells' trocar, etc. The nurse must be shown how this is to be done. *She must not forget to clean the needles.* Metal instruments must be kept bright by repeated cleaning, whether in use or not. For steel instruments, use the finest emery powder and wash-leather; for silver and plated instruments, use plate powder. Do not keep one dirty and oft-used piece of leather for cleaning purposes. This would soon become a source of danger. Once in two or three weeks, according to the dryness or dampness of the weather, should be the rule for frequency in cleaning metal instruments.

**13. Surgical Cleanliness in Catheters, Vaginal Tubes, etc.—**It is obvious that danger will be incurred by using these instruments for several patients consecutively. It is much the best plan when patients require their regular use to keep a separate instrument for each case. Female catheters are best made of glass, for their transparency shows any dirt, and they are very easily disinfected. A piece of india-rubber tubing

can be attached to the outer end if desired. Gum elastic catheters, however, are frequently used, and the longer (male) catheters are the most convenient. After use each catheter must be carefully washed under a tap, and then put to soak in a solution of perchloride of mercury (1 in 1000) till required again. It may very appropriately be kept in a tall narrow glass filled with this solution. The same precautions are necessary for gum elastic vaginal tubes. But vaginal tubes also may be made of glass, the end being bulbed and perforated with several holes, and not ending in a single terminal aperture.

Glass catheters, glass vaginal tubes, glass uterine tubes, and glass drainage tubes admit of perfect disinfection by soaking for an hour or two in strong commercial nitric acid, with subsequent washing in pure water. This destroys all organic matter and makes them surgically clean. This is a very useful precaution before taking a glass instrument into use for any case.

**14. What Antiseptic Precautions can be taken with Regard to the Patients**

themselves? The hot soap bath which a patient receives on entering a hospital is not only a precaution against visible dirt (and only a hospital nurse fully knows how needful this measure often is), but is also directed against invisible septic matter. Do not forget the patient's hair and nails. Local asepsis is often facilitated by removal of pubic hair. Any skin eruption, ulcer, or discharging sinus in any part of the body should be carefully noticed. These may seem small matters, but nothing is trivial which interferes with surgical cleanliness.

In abdominal cases special antiseptic precautions are usually ordered before operation. After a hot soap bath, the surface of the abdomen is rendered aseptic by cleansing with turpentine, and by covering it with lint wrung out of a 1 per cent. solution of carbolic, with gutta-percha tissue and with a bandage. These are only removed for the operation. A breast may be prepared for operation in the same way, the armpit being shaved at the same time.

If a nurse be furnished with a "star," or guarded razor, she can shave the skin with-

out any danger of cutting it, the hair being first thoroughly softened with hot soap lather. This is a small matter which it is often convenient to leave to the nurse when it is required as a preparation for any operation.

**15. Personal Antiseptic Precautions.**—A nurse who undertakes an important operation case should herself be in good health. She should abstain for ten days previously from contact with any dangerous case (see par. 5). A bath and a complete change of clothes are necessary. There is another preliminary measure which we recommend to those who can get it. A few days of country air is a capital preparation for the close and unremitting attention which abdominal cases need.

Now the best of all antiseptics, whether inside or outside a hospital, is abundance of fresh air.

## CHAPTER II.

### *WHAT TO OBSERVE AT THE BED-SIDE IN GYNECOLOGICAL CASES.*

16. **General Points.**—It must never be forgotten that although a patient is sent into a special hospital she may be suffering from, or may develop, any disease whatever. She may show symptoms of pneumonia, typhoid, scarlet fever, or even measles ; she may be diseased in lungs, heart, or kidneys ; she may be a diabetic, or an opium eater, or insane, or she may be shamming, and so on. The nurse must watch for cough, expectoration, vomiting, night sweats, skin eruptions, swelled feet, rigors, abscesses, bed sores, etc., just as in ordinary medical and surgical wards.

17. We now pass to the special points

to be noted in gynæcological cases. For obvious reasons the surgeon must depend a good deal upon the nurse's observation and report in these particulars.

**Condition of External Parts**, whether swelling, redness, soreness ; whether any prolapse or protrusion from vulva or rectum.—A nurse may often note protrusion when the patient has been straining or walking about, although the surgeon may find nothing at ordinary times.

**Presence of Vaginal Discharge**.—Appearance, quantity, whether of offensive odour, whether containing pus, or blood, or solid matter.

The occurrence and symptoms of menstruation must be carefully noted. Note time of onset and cessation, amount and character of discharge, and especially whether containing clots of blood or shreds of membrane. If any operation has been arranged for, the occurrence of the period should be reported at once. The nurse should ascertain whether any remedies that have been prescribed—such as medicine, douches, suppositories, baths, etc., are to be continued.

Usually they are suspended during the period, and the patient kept in bed. In case of severe pain the nurse will probably have the option of applying hot fomentations, or the india-rubber hot water bag, or other specified measures, but she should certainly not administer drugs or spirits without orders.

**The Condition of the Bowels.**—These frequently cause trouble, for there is a great tendency to constipation in this special class of patients. A certain amount of discretion is usually allowed the nurse in regard to the administration of enemata or of "House-mixture," etc. It is not necessary that the bowels should always be made to act daily—in many patients an action every second day is enough. But in all operation cases, in all cases of pelvic or abdominal inflammation, and in patients who are pregnant, purgatives must be given only under direction. The points to note are presence of constipation, or diarrhœa, or incontinence of faeces, whether there is pain or protrusion of piles or bowel-wall when the bowels act, the colour and consistence of the stools, and

the presence in them of blood or of pus. Occasionally certain cysts may discharge their contents into the bowel, and even tufts of hair or pieces of bone may be passed. All such must be carefully preserved for inspection. One condition that gives much trouble is the loaded rectum. The lower bowel may be loaded with an extraordinary quantity of hard faecal matter, and this may be the case although the patient has a small motion daily. This condition should always be reported when discovered, for it may be the cause of many symptoms. The bowel can be cleared by simple injections ; or, that failing, by injections of olive oil, which soften the mass, or, that failing, by the finger or other prescribed measures.

#### **Condition of the Bladder and Urine.—**

Note any frequency or pain or difficulty in micturition, and especially any retention of urine. Preserve specimens of the urine as directed. If any unusual appearance is noted, preserve a specimen, whether directions have been given or not. Specimens mixed with vaginal discharge are of little value.

**Condition of Abdomen.**—Note whether it is distended or tender, whether there is any redness or unusual appearance of surface, or any hardness or swelling in the groins. A distended bladder causes a swelling above the pubes, which can often be easily felt in a thin patient.

**18. Signs of Abortion.**—Cases of abortion (miscarriage) may occur from time to time in any hospital. A woman may seek admission for symptoms of abortion not knowing that she is pregnant ; again, pregnancy may complicate other diseases and abortion may come on. Hence it may be well to state what a nurse would observe in such an event. The symptoms at first resemble the onset of menstruation. The pain however comes and goes at more or less regular intervals and with increasing frequency and severity, and it assumes a bearing-down character. The patient in fact has slight “labour pains.” There will probably be discharge. This may be thin and watery ; but is more usually of blood, more copious than ordinary menstruation, and with clots in abundance, and it may

amount to severe flooding. In addition to this there may be passed shreds of membrane, or fragments more or less fleshy in appearance, or a little bladder-like sac with solid and fluid contents, or a distinct foetus. All must be carefully preserved for inspection. The case must be at once reported. Meanwhile the patient must be kept recumbent in bed, and all treatment previously ordered be suspended till further notice. (See also par. 37.)

19. For similar reasons **Child-birth** at or near full time may now and then occur in the wards. An accoucheur must be summoned in good time, hence it is well that every nurse should know the signs of the approaching event.

(a) The patient has an *abdominal tumour*. She may or may not know that she is pregnant. She may even deny the fact with the utmost confidence.

(b) She has *labour pains*. These are cramp-like pains, felt in back, thighs, and abdomen, but at first mostly in the back. They recur at frequent intervals, lasting from a few seconds to a minute or more.

They increase in frequency and severity, and at last assume a violent, bearing-down character.

(c) The patient will probably have a very slight discharge of coloured mucus. She *may* have a sudden gush of watery fluid. Occasionally there may be severe haemorrhage (flooding). This last is very urgent and serious.

It is very desirable that every nurse should understand what "first-aid" must be rendered in child-birth ; and we strongly recommend her not to consider her education complete until she has had a little experience in a lying-in charity. A "district nurse" for instance, may at any time be called in where a child has been born in the absence of an accoucheur, and a little knowledge will be most useful. Meanwhile we can recommend for her use Dr. Cullingworth's Short Manual for Monthly Nurses, or the Handbook of Obstetric Nursing by Drs. Ferguson and Haultain.

## CHAPTER III.

### *DETAILS OF SPECIAL MANIPULATIONS.*

20. **How to Place Patients for Vaginal Examinations.—The Dorsal Position** is the best, and is likely to become most common. If no special chair is provided, the following method may be adopted:—The patient is placed on her back, close to the end of the couch, with her knees drawn up. Take two small blankets and throw one over each leg. The blankets are so arranged that when the skirts are drawn up beneath them the patient is almost entirely covered. The position is less irksome to the patient, and better maintained, if each leg is supported by a nurse.

**Lateral or Semi-prone Position.—** Place the patient on her left side, with the

hips close to the edge of the couch, with the left arm behind the back and the head lying low and towards the opposite side of the couch. Cover with a sheet or blanket, and adjust the skirts beneath it.

**21. Appliances used in Vaginal Examinations.**—To facilitate clinical work in the ward and out-patient room the nurse must know the names of the instruments and appliances in common use and must know how to have them ready for use. It is a good plan to have an authoritative list drawn up of those things which are needed in the regular routine of work, and then each nurse can be taught the names and uses, and can always have her preparations complete. Such a list will be somewhat as follows, varying, of course, with different hospitals :

*Cylindrical vaginal specula*, such as Fergusson's, not to be used when they are cracked or chipped at the upper edge ; lubricate the upper half only.

*Sims's Duckbill Speculum*.—Warm in water before use, and do not lubricate the inner or reflecting surface.

*Neugebauer or crescent speculum* (two pieces); perhaps a bivalve or other speculum. *Uterine sounds*; Simpson's or other pattern. Warm these in water and not by rubbing in the hand; 1 in 40 carbolic solution is best. *Graduated uterine sounds or dilators*, *Hegar's dilators*, *retractors*, *spatulas*, *Sims's hooks*, *vulsellum forceps*, *uterine forceps*, *speculum forceps*, *curettes*, *scarifiers*, *caustic holders*, *sponge or mop holders* (several). These last are charged with absorbent cotton wool. For applying acid there is required a holder made of vulcanite or aluminium, charged with a small, firm plegget of wool. *Playfair's probes* (several). Cover these by placing a small, thin layer of cotton on the palm, moistening the probe, and rolling the wool around it from the tip downwards so firmly that it cannot come loose in the womb.

*Specula for Urethra and Rectum.*  
*Catheter and Bladder-sounds*.—There will also be needed the usual pocket-case appliances, appliances for the vaginal douche and uterine douche, vulcanite dishes, etc.,

also lint and wool and ordinary surgical dressings. Add to these a tape measure, several T-bandages, *tampons* made with cotton wool and secured with string left long enough to hang outside the vagina, antiseptic gauze, and *iodoform*.

*The chemical agents* used for applications should be very plainly labelled, and the nurse must familiarise herself with their names and appearance.

Finally, the nurse must learn the names of those **pessaries** which are in common use, and have them ready. By a pessary we mean here a mechanical support for the womb, and not a medicated vaginal suppository which, however, is also called a pessary by some. It is a pity that the term has two meanings. India-rubber rings may need softening in hot water before use. *Zwanck's* must be carefully cleaned and oiled that the screw or catch may work with ease.

After what we have said in Chapter I. it will be obvious how much care must be taken when many patients are examined in quick succession to maintain surgi-

cal cleanliness in the instruments and appliances.

22. An out-patient nurse is often asked by the surgeon to explain to the patients how to use the vaginal douche, or to administer enemata, etc. In these and other similar matters she can be very useful to the patients, some of whom are too reticent to confess their ignorance or perplexities to the surgeon. If a tampon is left after an application, remind the patient to remove it in twelve hours. We have known patients to wear them for a week. They will often ask whether pessaries are to be removed at night. Pessaries with external support and Zwanck's are, as a rule, to be removed each night and to be replaced before rising, the pessary being carefully cleansed and the vagina douched. Hodge's and "cradles," etc., are *not* to be removed by the patient, and "rings" only when directed.

23. **Vaginal Douches or Injections.**—These are best given with a *douche-can* which is hung above the bed, while an india-rubber tube descends to the vaginal

tube. A siphon might also be used with an ordinary jug appropriately elevated. (See par. 27.) A Higginson's syringe is perhaps most commonly employed. In the absence of other appliances a glass funnel and tube would answer very well. Glass is the best material for vaginal tubes, being more easily kept aseptic than the ordinary gum elastic tubes. (See par. 13.) The perforated oval plate so persistently supplied with each Higginson's syringe is of no particular use.

For the administration, the patient lies near the edge of the bed upon her back, with the knees drawn up, a bed-pan being placed beneath her. A bed-pan is sometimes used which has an india-rubber tube draining into a vessel on the floor, or the so-called bed-bath may be used. The bed is guarded with draw-sheet and mackintosh. The nurse, having attended to the surgical cleanliness of hands and tube (see pars. 8 and 13), lubricates the tube sufficiently, and passes it with extreme gentleness upwards and backwards for a distance of about 3 inches. If the tube meet with resistance

or cause pain, it may be withdrawn a little and a slight change in direction given to it. The patient may herself hold it in position while the nurse works the syringe or leaves the douche to run. Never use a syringe before it is full of fluid, or after it has partly filled with air. In removing, pinch the flexible tube just outside the vaginal tube to prevent escape of fluid left in the apparatus.

The quantity to be used will be prescribed. A pint is a common quantity, but a very much larger quantity may often be used with advantage, especially in the case of plain hot-water injections.

*Medicated injections* will usually be supplied in the form of a powder to be dissolved, or a solution to be diluted.

This dilution must be done with warm water so as to raise the temperature to nearly blood heat.  $85^{\circ}$  is a good average. Do not give it above  $100^{\circ}$  unless by special direction.

In the *hot douche* a higher temperature will be carefully prescribed, from  $105^{\circ}$  to  $115^{\circ}$  or more. Here the nurse must take

the temperature of the douche accurately with a bath thermometer, as a little carelessness may scald the patient. These douches are a kind of internal fomentation, and are sometimes ordered by *time* rather than *quantity*; and it is here that the douche-can and the self-emptying bed-pan are most useful.

*Vaginal Douche in Lateral Position.*—A surgeon sometimes wishes to give a douche in the lateral position, especially when he is operating upon the cervix, etc.

Draw the patient to the very edge of the bed till the hips project over. A mackintosh is placed, half of it under the patient's hips and thighs, and half hanging down in front of the bed. The mackintosh falls into a pail or foot-bath, and by a little adjustment forms a funnel which collects all the water. This is a very cleanly way of managing in a private house. Exactly the same plan may be adopted with a patient in the *lithotomy position*, as in operations on the perineum, etc. In our hospital, however, we use a dish carefully moulded to fit the perineum and buttocks.

**24. Medicated Vaginal Suppositories,** also sometimes called pessaries (*see par. 22*). — These must be slightly lubricated and pushed gently into the upper part of the vagina. They must, of course, not be inserted when a douche is to be used shortly, nor when the bowels are about to act. It is only in rare cases of prolapse that they will fail to stay in, and need to be retained by a tampon and a T-bandage.

**25. Glycerine Tampons.** — These are ordinary tampons of cotton wool soaked with as much glycerine as they will take up. They are passed with forceps through a speculum (*see par. 26*). A plain glass speculum will answer best for this purpose, or a Barnes's tampon-introducer may be employed. A watery discharge will follow their use, and hence a suitable absorbent pad must be applied externally.

**26. To pass a Fergusson's Speculum.** — A nurse will only pass this under the express direction of the surgeon, save only in very exceptional circumstances, and she should be carefully taught by personal instruction in the first instance. As how-

ever nurses are, in some hospitals, required to use specula, the following notes are given. In this and similar manipulations little or no pain is caused by pressure upon the posterior wall of the vagina and the posterior end of the vulva, but any force which presses the anterior parts against the bone causes great discomfort. In passing the speculum for glycerine tampons, and for plugging, it is not usually necessary to try to bring the cervix into view. Only a small speculum can be used for women who have not borne children. In unmarried women it must not be used. Place the patient in the left lateral position (*see* par. 20), warm the speculum, and oil the outside. Take the wide end of the speculum in the right hand, holding the shorter side in front. Open the vaginal entrance with the first and second fingers of the left hand, and pass the speculum upwards and backwards with gentle pressure until it is arrested. The tampon can now be inserted. Another method, useful in those who have borne children, is as follows: The patient being in the same position, pass the first

two fingers of the right hand (duly lubricated), and draw back the perineum towards the rectum. Hold the speculum in the left hand, and pass as above. This method best avoids painful pressure anteriorly.

**27. To Arrange a Siphon.**—A siphon is a contrivance by which water can be drawn from a vessel by a tube passing over its upper edge, the water thus “running up hill.” For example : a reservoir is made by elevating a can of water above the level of the patient, an india-rubber tube reaches from the bottom of the can, over the side, and down to the vaginal tube, to which it is attached. The tube will not run until it has been first filled with water. This can be done with a Higginson’s syringe, or by suction, or by immersing it in the reservoir and drawing it out full. Also the outer end of the tube must be kept lower than the bottom of the reservoir, or it will cease to act at once.

**28. To Pass the Catheter by Touch.**—Pass a surgically clean catheter (*see* par. 13) with surgically clean hands (*see* par. 8), and render the external genitals surgically

clean, first by cleansing with antiseptic solution.

*Position of patient*, on the back, lying near right side of bed, with knees drawn up, all covered with blanket. The nurse standing on right side of patient, passes her left hand over patient's thigh, and with the left fore-finger (which is lubricated previously) determines the position of the *meatus* (or opening into the urethra). This is found by first passing finger within vagina, then feeling for the dimpled meatus, which lies just above the entrance to the vagina, and just under the point where the pubic bones meet to form the pubic arch. She then takes the lubricated catheter in the right hand, and passes it under the right thigh, and along the left fore-finger. It should easily pass upwards into the bladder, and no force must be used. The urethra measures one inch and a half.

If it does not pass easily the nurse has probably missed the meatus. If it passes very easily and no urine flows, she must make sure that it has not slipped into vagina. Sometimes from swelling or the

displacement, it is very difficult to find the meatus, and in such a case it is best to pass the catheter by sight, and not to persevere in fruitless attempts. There is a right and a wrong way to withdraw a catheter, and the outer end must be stopped with the finger to prevent the urine which it contains from falling on the bed or the patient.

**29. To Wash out the Bladder.** Water at  $100^{\circ}$  will be prescribed for this purpose with some antiseptic—say boric acid, half an ounce in a pint. A double-current catheter with syringe attached may be used, but the following plan is better:—To a large glass funnel attach about a yard of flexible tubing, and connect this with a good-sized catheter. Fill the whole with the solution, and then pass the catheter. Now elevate the funnel just above the level of the patient's body, and pour in the solution from a jug till it ceases to sink. Now depress the funnel till it hangs over a receptacle on the floor. It will then act as a siphon and empty the bladder. Repeat the process until the solution returns clear, or

until a prescribed quantity has been used. As some water may escape by the side of the catheter, the bed must be protected with mackintosh for this operation.

30. **On the Lithotomy Position.**—The patient is placed upon her back, with the buttocks close to the foot of the operating table or the edge of the bed, with the knees and thighs bent up and separated. This position may be retained (1) by two nurses holding the legs, but this is a waste of nursing strength; (2) by the use of the manacles which unite the wrist to the ankle (but these do not make manual support unnecessary); (3) by Clover's crutch, which consists of a crossbar, which is fixed between the knees by means of straps buckled round the thighs just above the knees, and of a long strap which holds up the crutch by passing round the neck, and which is best passed over one shoulder and under the opposite armpit to make it less liable to impede the breathing. This crutch holds the knees up and separates them, but a nurse is still required to steady the hips and knees, which tend to roll to one side.

(4) The best plan is to use the manacles and the crutch together. This very simple expedient makes other support unnecessary. The patient remains steady in the lithotomy position, and a nurse is needed only to hand sponges, etc. Thus, for many operations in private houses the operator requires only an anaesthetist and one nurse or attendant, and in an emergency the writer has operated with an anaesthetist only.

Before placing a patient in the lithotomy position, be sure that she has not a *stiff-knee or hip!* This is a caution learned from experience.

## CHAPTER IV.

### *ON THE NURSING OF SPECIAL CLASSES OF CASES.*

#### *ABDOMINAL CASES.*

31. It will be useful to consider this subject in relation to the conditions which present most difficulty—namely, operations in private houses. Let us ask, first, what are the arrangements which a nurse may be required to make for the performance of an abdominal section in a private house?

**Preparation of Room.**—The surgeon will select this. If two rooms are used, one for operation and one for the sick ward, both must be brought into aseptic condition as far as possible. Clear away all superfluous furniture, and especially bedhangings and curtains, chests of drawers and boxes

filled with accumulation of varied nature and age, and the fusty contents of cupboards and closets. It is best to take up the carpet and have the rooms washed, cleaned and aired some days previously. Light the fires and see whether the chimneys smoke, and get the chimneys swept, if necessary.

The surgeon will doubtless inquire about the house drainage, etc., but the nurse may quietly observe for herself whether the sanitary appliances are kept clean, the water-closet well flushed and free from offensiveness, and whether there is any accumulation of rubbish or soiled linen anywhere about. In regard to these matters there is no limit to the ignorance and carelessness of many people, even of those in good social position. The nurse may tell the surgeon privately what she observes.

We need hardly say that a single bedstead, and not a double one, will be needed, and that a mattress rather than a feather bed must be placed upon it. The bedding must be absolutely clean, and there is greater safety in new blankets than old ones.

On the day of operation both rooms must be warmed to 70°. Never warm a room by burning the gas-lights.

The patient's room should have a *bell*. An electric bell can now be fitted in an hour temporarily to any room for a very small cost.

The surgeon will select the operating table and its position. Protect the floor beneath the table by a piece of oil-cloth, or mackintosh. Fluid is sometimes almost unavoidably spilt on the floor during the operation, and it should be prevented from reaching the room below.\*

*Cover the table* with (1) a blanket ; (2) a piece of mackintosh hanging well down on each side, so that any fluid running down can be guided into a bucket, or foot-bath, etc. ; (3) a draw-sheet.

### 32. What to have Ready for Operation :—

The operating table as directed.

\* Messrs. Heald Bros., 59, Knightrider Street, London, sell waterproof paper which is very suitable for this purpose. It is, however, not sold in less quantities than a roll of one hundred yards.

Two or three tables for instruments.

Tray for instruments (large meat dishes will do).

Washstand, soap, nail-brushes.

Basins for washing sponges.

Smaller basin for antiseptic solution.

Small basin for drainage-tubes.

Receptacle for tumour.

Two foot-baths, or buckets, etc., to stand under operating table.

Bucket for slops, etc.

Plentiful supply of hot and cold water.

Also two or three gallons of *boiled* water, also boiling water ready in kettles.

Bath thermometer reading to 212° F.

Ordinary thermometer hung over head of bed.

Small basin in case of vomiting.

Foot-warmer and hot bottles.

Clean towels.

Carbolic oil or vaseline.

Antiseptic solutions as prescribed.

*Dressings.*—These again will be prescribed by the operator. Have them ready in a tray or small basket, and put them aside ready for the end of the operation.

They will probably include—

Antiseptic gauze. Iodoform.

Gamgee or other tissue.

Antiseptic wool.

Strapping—ordinary strapping needs cutting in strips and warming in usual way.

Many-tailed abdominal bandage.

(Make these of flannel or flannelette, and have two or three ready).

Safety-pins.

Scissors.

If a drainage tube be used, some kind of waterproof material may be used to fit round it and protect other dressings.

Provide ordinary kitchen aprons for surgeons.

*Sponges*—carefully counted before operation.

If one falls on the floor see that it is not used again.

Count sponges before the wound is closed up to be sure that none are left inside. At the same time count the artery forceps.

On preparation of sponges, *see* par. 11.

Some surgeons will prefer strips of lint,

or pads of wool rung out of water, or other appliance, to sponges.

Shaving appliances : hot water and soap, or carbolic oil, with a scrap of rag or soft paper.

Brandy and feeding - cup. Medicine glass.

Enema syringe. Bed-pan.

Syringe for nutrient rectal injections.

Catheter.

A surgeon may prefer to use a special mackintosh with oval aperture for the incision, the edge being covered with plaster. This is not very satisfactory, becoming detached as the abdominal walls collapse after removal of tumour, and hence being of little service in the "washing-out" stage of the operation when most wanted.

A hand-mirror is sometimes useful for illuminating abdomen.

The patient's bed is made thus : (1) mattress ; (2) blanket ; (3) mackintosh ; (4) draw-sheet. Some add : (5) second mackintosh ; (6) second draw-sheet. A pillow is usually placed under the knees. A bed-

frame or "cage" may be needed to support the bed-clothes. The patient is covered with sheet, blanket and counterpane, with perhaps an extra coverlet over the feet. Some prefer to put a blanket next to the patient. The bed must be thoroughly warmed during the operation, so that there may be no chill on removing the patient into it.

**33. How to Prepare the Patient for Operation.**—We need not dwell upon the usual preparations for anaesthesia, viz., preliminary abstinence from food, the removal of false teeth, the arrangement of the hair without hair-pins. The special points to be noted are as follow :—

*The bowels need to be cleared.* Ask directions for each case. A purgative the morning of the previous day, followed by an enema early on the day of operation will usually do very well.

*The patient needs a hot-bath of soap and water,* probably ordered the night before operation.

*The surface of the abdomen* must be rendered aseptic (*see* par. 14).

The patient must be warmly dressed. She must wear a flannel jacket and singlet, flannel drawers and warm stockings. When she is placed on the table, blankets may be put over chest and legs. During a long operation a fresh warm blanket may be wrapped round legs and feet, and a hot bottle applied.

The *bladder must be emptied* just before operation, either naturally or by catheter, as directed.

34. **After-treatment.**—The first thing is to dry the patient thoroughly and remove wet things from under her. Two persons standing on opposite sides and joining hands beneath the patient's shoulders and hips, can lift the patient a foot from the couch for this purpose. The surgeon will usually have this done before the dressings are completed. After the patient has been removed to bed, the nurse needs instructions as to whether the catheter is to be systematically passed or not; as to whether any treatment is to be adopted for vomiting; as to allaying thirst; and as to diet. The diet will be almost *nil* for twenty-four hours,

but it is no use to lay down rules here. Each surgeon will give his own directions.

The nurse must watch for signs of secondary internal haemorrhage such as great pallor, faintness, and very weak and rapid pulse ; also for any soaking of blood through the dressings from the drainage tube.

She must also watch for abdominal distension and tenderness, and for vomiting after that which is due to the anaesthetic has passed away ; also for excessive pain. There is often a good deal of pain after abdominal section. The abdominal wound itself may cause this, and only experience can teach what is really alarming, but if in doubt, she should communicate with the surgeon. Distressing flatulence can be treated in various ways. The nurse is quite safe in passing within the bowel the nozzle detached from an enema syringe, to allow flatus to escape, but should ask for definite instructions for further measures. In a private house she should not hesitate to communicate with the surgeon on the least suspicion of anything going wrong. He would far rather be sent for unnecessarily

than be left ignorant of an emergency when action is needed. If in doubt, she can at least send a note describing the condition present, and the surgeon will judge whether a visit is needed. In a hospital, in like manner, she will report important symptoms at once.

She must act very strictly to orders obtained as to the exclusion of friends and visitors, for abdominal cases are easily upset, and there are few irritants worse than injudicious friends.

There must be no relaxation of vigilance during convalescence. The room must not be allowed to become chilly at night, the patient must not be left too long without food, nor be permitted to make sudden or violent exertion, or to overtax her strength. Any tendency to fainting calls for special care in these particulars.

## 2. OTHER CASES.

**35. On Operation for Ruptured Perineum.**—In such cases it is not easy to get the parts surgically clean for operation, especially if there be incontinence of faeces. The patient will probably be ordered a hot

bath the night before, and it is a good thing for the nurse to shave the perineum at the same time. The rectum must be cleared with enema, and the vagina thoroughly douched shortly before operation, and the parts should then again be carefully washed.

The care of the bowels is of great importance in these cases. When they act after operation the newly united parts may break down, and if the bowels are kept from acting for a week the danger is greater when they do act. The nurse must receive instruction on the following points : (1) What is to be the diet of the patient for a few days before and after the operation ? (2) What purgatives and enemata are to be given before and after operation ? (3) What local douching is to be employed ? (4) Is the catheter to be passed after operation ?

For this and similar operations the patient must be warmly dressed. She must wear warm stockings, and flannel drawers can be easily arranged so as to cover the thighs yet not interfere with the operation. The patient will be placed in the "lithotomy" position. A T-bandage must be secured

round the waist ready for use. On removal to bed the legs must be tied together at the knees, a pad being placed between the knee bones. The nurse must watch for bleeding, pain, redness, heat, swelling, and discharge of pus.

**36. Vesico-vaginal Fistula.**—On admission these cases have a constant dribbling of urine from the vagina, and are best put on a waterproof bed, with central drainage. The redness and soreness of the parts, and the crusting with earthy matter, may give trouble, but constant bathing, removal of the hair, the use of oil or vaseline, of starch and zinc powder, or starch and boric acid powder, or of zinc or boric acid ointment will do much to bring the parts into better condition. The back must be watched for bed-sores.

After operation the nurse must ask for instruction as to the use of the catheter, and must watch for bleeding from vagina or bladder, also for obstruction of the catheter by clots and mucus; for pus in the urine, for pain and local irritation, and for escape of urine from the vagina.

If serious bleeding occur and no assistance be at hand, a vaginal injection of ice-cold water, very carefully given, might stop it. Failing this an injection of water at  $120^{\circ}$  F. might arrest it.

In such a case the vagina must not be plugged lest the wound should be torn open.

**37. Care of Abortion Cases.**—We have already referred (*see* par. 18) to cases where abortion may occur spontaneously in hospital, or may be designedly induced in the course of treatment. If the haemorrhage should be very great and no surgeon be at hand, the vagina might be plugged in the manner described in the next paragraph. We are anxious to impress upon the nurse the extreme amount of care needed in the after-treatment of these patients. They are in the “puerperal,” or child-bed state, and are rather more liable than ordinary lying-in women to blood-poisoning in childbed, which is the cause of the different forms of puerperal fever. Hence they need every precaution that is usually taken in confinements, and rather more than usual. For instance, they need

every care to prevent contact with septic matter ; they need, in fact, to have the principles of surgical cleanliness enforced as much as in any operation case. They can bear little excitement, must not see visitors, must be very gently dealt with when they are captious and unreasonable. They must not be allowed to get out of bed, must not be left long without food, and will need feeding in the night. Give them all the care that an abdominal section needs, and even when all is done, they will occasion some anxious work from time to time ; personally, we prefer a separate ward for these cases.

**38. What is to be done if Flooding occurs in a Gynæcological Case ?**—This will occur chiefly : (1) In fibroid tumours ; (2) in cancer cases ; (3) in connection with abortion. The signs of excessive haemorrhage are the passing of many large clots, the pallor and faintness and weak rapid pulse of the patient. The nurse will of course report the case at once, but in very urgent conditions, when no help is at hand, “first aid” must be rendered, and

plugging the vagina is one of the most available expedients. It must be done thoroughly if any good is to be effected, and the remedy is disappointing when blood is flowing from within the womb. Nevertheless it is better than nothing.

**Method of Plugging the Vagina.—** Prepare “tampons” or “plugs” of anti-septic cotton-wool, each as large as will conveniently pass through a Fergusson’s speculum. Secure each by a piece of string, or fasten them kite-tail fashion on one long string. Strips of gauze or lint will do instead of cotton wool. This, indeed, is apt to form small hard masses when soaked with blood. Pieces of sponge (wrung out of 1 in 40 carbolic solution) are very good for this purpose, and in any case it is well to make the first tampon of sponge. See that the bladder is empty. Then pass the cylindrical speculum (*see* par. 26), a plain glass one will do. Then pass the first tampon with speculum forceps, and press it against the vaginal portion of the womb. Next, slightly withdrawing the speculum, pass the second,

and so on. The object is to pass as many plugs as possible, and to pack them closely till the vagina is full. A pad on the vulva and a firm T-bandage complete the operation. Place the patient on her back, with the head low, and elevate the foot of the bed. In case of cancer, the speculum must be passed with extreme care and gentleness. Plugs must be removed in twelve hours, but meanwhile the surgeon will have seen the case. The vagina must not be plugged for bleeding after an operation in which stitches have been inserted.

**Arrest of Hæmorrhage by Cold or Heat.** — Injections of ice-cold water, or placing pieces of ice in the vagina, will sometimes stop vaginal hæmorrhage. So will the injection of water at a temperature of from 110° F. to 120° F. In this case the temperature must be checked with a bath thermometer, lest the patient should be scalded. A teaspoonful of tincture of iodine may be added to each pint of water.

It will be very seldom that a nurse in any hospital will be placed in a position

where there is not time to summon a surgeon before such haemorrhage becomes serious enough to need the above treatment. Yet, if a district nurse, for example, were called to a case of haemorrhage from cancer of the womb, it would be legitimate to give a hot iodised injection first, and that failing, to plug the vagina.

39. **On so-called Hysteria.**—Hysterical patients present the most extraordinary phenomena known in medicine. There is hardly any symptom from which they may not appear to suffer. They may seem to be paralysed, blind, deaf, or dumb. They may complain of intense pain in any part. They may eat no food and pass no excreta, may have convulsive seizures, may have well-marked abdominal tumour; they may lie like the dead, or rage like maniacs. And yet no organic cause may be discoverable for these symptoms, any one or the whole of which may suddenly disappear, or having disappeared, return again. They are patients with bodies gone mad. We have but a few words to add here, but these are important.

(1) Never accuse the patients of shamming, never say that they have no pain, or that any symptom is pretended, and never mention the word *hysteria* in their hearing. If the nurse do so she will lose her power to help them.

(2) This disease lives and thrives on sympathy. Kind-hearted pitying visitors and fellow-patients, the presence of their own friends and relations, the visits especially of kind gentlemen friends who take deep and compassionate interest in their symptoms; all these conspire to prevent recovery.

(3) A kind, firm, cheerful nurse, who neither scolds nor sympathises, who shows perfect certainty of the patient's recovery, who will not be refused in administering the treatment prescribed, who vigorously excludes visitors, and who has unlimited patience and tact, may work wonders with some of these cases.

We admit that one cannot always find such an ideal hysteria nurse at short notice.

40. **Malingering and Misconduct.**—There is hardly any symptom which, under

certain circumstances, patients will not feign. They will even injure themselves to simulate disease. *Malingering* is the technical name for feigning to be diseased. Mysterious stains on the skin, unaccountable haemorrhages from various parts, and wounds of remarkable appearance may prove to be due to self-inflicted lesion. Pregnant patients will sometimes make every effort to mislead us as to their condition, and will deny it with a solemnity, fervour, and consistency which almost make us doubt the evidence of our senses. Patients will take opium or morphia, and may have it concealed in their lockers or brought by their friends. They may procure alcohol in every form with a cunning and astuteness that are almost incredible. Eau de Cologne, spirit of lavender, spirit of wine, or sal volatile may serve them as intoxicants; occasionally they may take chloral or chloroform. See that any drugs in or near the wards are absolutely inaccessible to the patients, and let the dispensary be secured at night, for the resources of dipsomaniacs are infinite.

41. **Precautions against Fire, etc.**—In many cases of emergency surgeons and nurses have to work short-handed, in very cramped and unfavourable positions, and by artificial light. Experience of certain accidents which have happened, and may happen again, under such circumstances leads us to note the following precautions:

*Anæsthetic ether* is very highly inflammable. Its vapour brought near a candle may take fire. Ether is also contained in *collodion*.

*Cotton wool* is very inflammable. So are most dressings. Keep the candle well away from the dressing basket.

Instruments made of *celluloid*, such as catheters, uterine tubes, specula, stethoscopes, &c., will burn like squibs if accidentally ignited.

A *vulcanite* instrument will also ignite if touched with a cautery, etc.

*Carbolic acid* (or phenol) and *nitric acid* will explode when mixed together. We have seen an accident from this cause, where a nurse mixed the two in cleaning some test-tubes and capsules.

If concentrated carbolic acid be dropped on the skin, apply olive oil ; if nitric acid or pernitrate of mercury, apply carbonate of soda or its solution.

Never take a stick of caustic potash (*potassa fusa*) in the fingers. Vinegar is its antidote. Handle *nitrate of silver* points with wool or paper, and see that they are very firmly fixed in a holder before they are used.

## APPENDIX.

*TABLE TO SHOW STRENGTH IN WHICH CERTAIN  
ANTISEPTIC AND OTHER AGENTS ARE COMMONLY  
EMPLOYED IN GYNECOLOGICAL WARDS.*

### **Carbolic Acid, also called Phenol.**

For wounds, 1 in 200; for immersing instruments, 1 in 100; for vaginal injection, 1 in 40 or 50 for hands and skin, and for sponges, 1 in 40; for catheters and vaginal tubes, etc., and for the steam spray, 1 in 20; for carbolic oil, 1 in 20 to 1 in 10.

### **Perchloride, or Bichloride of Mercury, called also Corrosive Sublimate.**

For wounds, 1 in 2000 or 3000; for vaginal injection, 1 in 2000; for hands and skin, 1 in 1000 to 1 in 500; for catheters, vaginal tubes, etc., 1 in 500.

### **Tincture of Iodine.**

For wounds, one fluid drachm in a pint: for vaginal injection, two fluid drachms in a pint; for the hands, after contact with septic matter, two to four drachms in a pint.

**Boric or Boracic acid.**

A saturated solution, or about 3 p.c.

**Salicylic Acid**, 3 to 10 grains in a pint.

**Salufer**, 20 grains in a pint.

**Thymol**, 1 in 1000.

For **Vaginal Injections**, the following quantities  
in the pint of water :—

Alum, 60 grains; Condyl's fluid, one to two drachms;  
sulphate of zinc, 60 grains; chloride of zinc, 20  
grains; bicarbonate of potassium and sodium, one to  
four drachms: liquor carbonis detergens, one to two  
drachms; borax, 60 grains.

Be careful not to confound Liquor ferri perchloridi  
(solution of perchloride of iron), with Liquor ferri per-  
chloridi *fortis* (*strong* solution of perchloride of iron).  
The latter is four times the strength of the former;  
and is acrid and caustic.

## INDEX.

---

ABDOMINAL section, 56-65  
Abortion, signs of, 38  
    care of, 68  
Absorption of antiseptics, 20  
Abuse of antiseptics, 19  
After-treatment of abdominal  
    section, 63  
Antisepsis defined, 16  
Antiseptic lubricants, 25  
    dressings, 26  
    soaps, 23  
Appliances for vaginal exami-  
    nation, 42  
    for abdominal section, 58  
Asepsis defined, 16

BLADDER, 37  
    washing out of, 53  
Bowels, 36

CARBOLIC acid, 21, 75, 77  
Catheters, 30  
    danger of sepsis, 14  
    passage of, 51

Childbirth, 39  
Clover's erutet, 54  
Cost of dressings, 27

DISCHARGES, various, 17, 19  
Disinfectants, 17

FERGUSSON'S speculum, 49, 42  
Fire, precautions against, 75  
Flooding, 69, 71

GENERAL diseases in special  
    hospitals, 11, 34  
Glycérine of mercury, 26  
Glycerine tampons, 49  
Gynaecological cases classified,  
    10  
Gynaecology defined, 9

HANDS, wounds of, 18  
    cleanliness of, 22  
Hot douche, 47  
Hysteria, 72

INSTRUMENTS, care of, 29  
    corrosion of, 21

LABOUR, see *Childbirth*  
Lithotomy position, 54  
Loaded rectum, 37

- MALINGERING, 73  
Medicated vaginal douches, 47,  
    78  
    suppositories, 49  
Menstruation, 35  
Mercury, perchloride of, 21, 77  
NITRIC acid, 22, 75  
Nurses, wider education of, 9  
OBSERVATION of symptoms,  
    34  
Operations, preparation for, 32,  
    62, 66  
Out-patient-room, 42, 45  
PASTA pro tactu, 26  
Perineorrhaphy, 65  
Perineum, ruptured, 65  
Personal precaution, nurses',  
    31  
    patients', 32  
Pessaries, 44, 45  
Phenol, see *Carbolic acid*  
Plugging vagina, 70  
Positions for examination, 41  
SEPSIS defined, 16  
Siphons, 51  
Sponges, bleaching of, 29  
    septic 14  
Surgical cleanliness :  
    of hands, 22  
    of instruments, 29  
    rationale, 12  
THYMOL paste, 25  
URINE, 37  
VAGINAL discharges, 35  
    douches, 45-48  
    examination, 41  
    medicated douches, 47, 78  
    suppositories, 49  
    tubes, 30  
Venereal cases, 18  
Vulva, 35  
WOUND poisoning, prevention  
    of, 15  
    sources of, 13, 17







